CALIFORNIA
ENERGY
COMMISSION

CUSTOMER CREDIT RENEWABLE RESOURCES ACCOUNT: REPORT TO THE GOVERNOR AND THE LEGISLATURE

COMMISSION REPORT

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Gray Davis, *Governor*

CALIFORNIA ENERGY COMMISSION

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Table of Contents

Customer Credit
Renewable Resources Account
Report to the Governor and the Legislature

Executive Summary

In January 2003, the Legislature asked the California Energy Commission (Energy Commission) to evaluate and make recommendations regarding the customer credit program. The customer credit program is an element within the Renewable Energy Program (Senate Bill 1038 (SB 1038), Sher, Chapter 515, Statutes of 2002). In particular, the legislation required the Energy Commission to evaluate these three specific areas: whether the program can serve its purpose in its current form, whether it would better serve its purpose with adjustments, or whether it should be discontinued and the funds used for other purposes.

This report presents three recommendations, based on this evaluation and summarizes the research and analysis by the Renewable Energy Program staff and its technical consultants, the XENERGY contracting team.

Recent market and legislative changes have significantly affected the customer credit program, leading to the need to evaluate the future of the program. These include changes in California's market structure, the suspension of direct access, and the advent of California's Renewable Portfolio Standard.

In 1996, Assembly Bill 1890 (AB 1890, Brulte, Chapter 854, Statutes of 1996) authorized four years of funding to support renewable energy in California by requiring California's three major investor-owned utilities to collect $540 million from their ratepayers over a four-year period, beginning in 1998. Senate Bill 90 (SB 90, Sher, Chapter 905, Statutes of 1997) established the Renewable Resource Trust Fund and directed the Energy Commission to distribute funds through several distinct accounts and subaccounts, including the Customer Credit Subaccount (the Subaccount, also referred to as the customer credit program).

Program Overview and Recent Legislation

Under SB 90, the Customer Credit Subaccount was designed to reduce the premium customers paid for renewable energy and thus stimulate market demand. The $75.6 million allocated to the Subaccount offered financial incentives to consumers via renewable energy providers. By passing the credit along to their customers, eligible renewable providers were able to compete with conventional electric service providers.

- In September 2000, the Legislature adopted the Reliable Electric Service Investments Act, which extended the collection of funds for renewable energy incentives, starting at $135 million per year in 2002. The RESIA also directed the Energy Commission to

develop an investment plan for utilizing these funds for the first five years of their collection.

- In June 2001, the Energy Commission recommended funding allocations and mechanisms in a report titled *Investing in Renewable Electricity Generation in California (Investment Plan)*[1].

- In October 2001, Assembly Bill 1724 (AB 1724, Pavley, Chapter 774, Statutes of 2001) deleted provisions that public entities may not receive customer credits and established a cap on the aggregate amount they may receive.

- In September 2002, Senate Bill 1078 (SB 1078, Sher, Chapter 516, Statutes of 2002) established a RPS in California. SB 1078 requires the IOUs to increase their procurement of renewable energy resources by at least one- percent per year so that 20 percent of their retail sales are from eligible renewables by 2017.

At the start of the program, the Energy Commission set the credit level at the program's maximum amount of 1.5 cents per kilowatt-hour (cents/kWh) to encourage market development. However, beginning in late 2000, market growth led the Energy Commission to reduce the credit level over the duration of the program as a way to extend the funding availability for customer credits. Since December 2000, the credit level has remained constant at 1 cent/kWh.

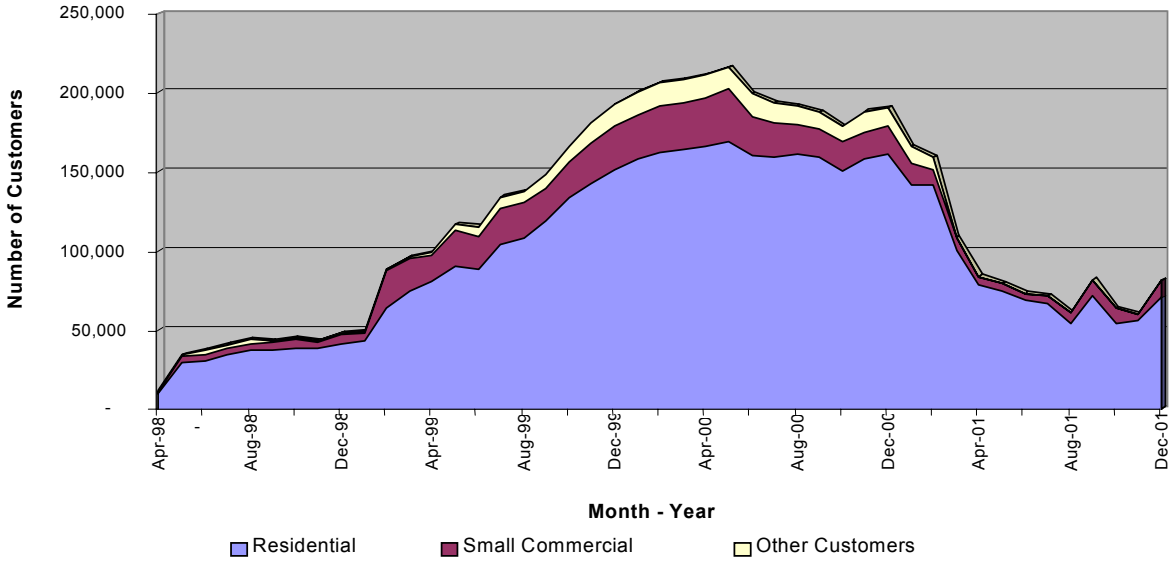
During 2000 and 2001, monthly disbursements were very volatile, but decreased considerably in 2001. Changes in the market, along with no payments to large customers, resulted in the Subaccount becoming under-subscribed in 2001. In view of the significant increase in the Emerging Renewable Resources Account activity, the Energy Commission re-allocated $10 million in funds from the Subaccount to the Emerging Account.

Figure 1 shows the total number of customers receiving the customer credit from 1998 through 2001. The market peaked in mid-2000, with the number of customers purchasing renewable energy hitting a high of 216,372 in May 2000 and purchasing a record 261.7 million kWh in August 2000.

One year later, in the summer of 2001, fewer than 71,000 residential customers were being served by registered electric service providers and receiving customer credits, demonstrating the large impact of the market disruption caused by the high electricity prices and regulatory uncertainty that began in late 2000 and ultimately led to the suspension of direct access.

During 2002, the direct access market continued to decline in response to California's energy crisis, and activity in the customer credit program slowed proportionately. However, the structure for implementing the program had remained relatively unchanged through December 2001. The Energy Commission did not make customer credit payments on 2002 activity because of uncertainties over potential changes in statute that could modify eligibility requirements for customer credits.

Figure 1
Number of Customers Receiving Customer Credits



While the number of customers and providers participating in the program has decreased, some customers continued to receive renewable electricity from registered electric service providers throughout 2002 with the expectation that customer credits would be extended through pending legislation. This expectation was supported by an Energy Commission staff letter to program participants in March 2002 (see Appendix 2).

As noted above, since mid-2000, customer credit activity has declined. The Energy Commission must now re-examine whether continued customer credit funding is likely to impact future renewable energy market development, stimulate the marketing of new renewable energy products by eligible suppliers, or materially contribute to a self-sustaining demand for renewable energy outside of utility procurement. Considerable uncertainty surrounds the prospects for direct access and renewable energy markets operating within California, now driven by the RPS. The issues are complex, and the viability of a customer-driven renewable energy market in California cannot be predicted or assumed.

Status and Trends in Renewable Energy Markets

Three subject areas particularly define the current status and outlook for consumer choice in California's competitive renewable energy market: the direct access market, California's RPS, and tradable renewable energy certificates.

- **The direct access market:** The direct access market has been volatile over the past three years. The energy crisis precipitated a significant exit from direct access contracts in late 2000 and early 2001, as customers returned to the default utility and electric service providers left the market. Subsequent low wholesale electricity prices, compared to bundled rates, caused a dramatic increase in direct access, primarily for larger customers in the summer of 2001. On September 20, 2001, the California Public Utilities Commission (CPUC) suspended the opportunity for customers to choose to enter into direct access contracts.[2] On March 21, 2002, the CPUC issued a decision that confirmed the September 20, 2001 suspension date and discussed applying a potential exit fee or direct access surcharge for customers who had entered direct access contracts before the suspension date.

  Depending on the outcome of CPUC decisions on exit fees and other issues and legislative decisions on electricity market structures, direct access customer demand could diminish further or it could expand. Legislative changes could also expand the eligibility of larger direct access customers to receive customer credit funds.

- **California's Renewable Portfolio Standard:** SB 1078 created the state's new Renewable Portfolio Standard, which requires retail sellers of electricity to increase the renewable content of their energy deliveries by an average of one percent per year over a baseline level existing on January 1, 2003, as determined by the CPUC. This annual increment continues until renewable energy comprises 20 percent of the energy portfolio, a target that must be achieved by December 31, 2017. To achieve this target, retail sellers must stimulate new investment in renewable energy resources, either by third-party, non-utility developers who contract for energy deliveries or by the retail sellers themselves (direct investment).

  The key to meeting the target will be the availability of Public Goods Charge funds and policies adopted to guide their allocation. Using Public Goods Charge funds for Renewable Portfolio Standard purposes may reduce the importance of using funds for customer credit incentives. The Renewable Portfolio Standard represents an obligation to procure renewable energy, in effect replacing the choice to do so that was fostered by the customer credit program. If Public Goods Charge funds are used for the Renewable Portfolio Standard, then fewer Public Goods Charge funds will be available for customer incentives.

- **Tradable renewable energy certificates:** A growing trend in renewable energy markets is the trading of renewable energy attributes separately from the underlying energy (known as renewable energy credits, among other names). This practice

facilitates the marketing of renewable energy in the broader energy marketplace and has been used in wholesale energy transactions in the Subaccount on a regular basis. Assuming a viable and robust retail renewable energy market, one option to use Account funds effectively would be extending the customer credit program eligibility to transactions involving retail renewable energy certificates. Such transactions can be available to customers to support renewable energy without requiring a direct access contract.

Legislative change, however, would be required for this option to be put in place.

Options and Recommendations

In developing its options and recommendations, the Energy Commission considered a number of issues such as whether continuing to fund the customer credit program would stimulate the market for renewable energy products or contribute significantly to a future renewable market or contribute to a self-sufficient market. The Energy Commission also took into account the considerable complex issues and uncertainty about future regulatory decisions, such as those concerning California's Renewable Portfolio Standard.

To meet the objectives in SB 1038, the Energy Commission covered three basic decision areas:

- **Whether to continue or discontinue the customer credit program:** This choice depends upon whether there is a perception of high value in continuing customer credit support for the retail renewable energy market or a perception of significant uncertainty and lack of evidence that the Account has the potential to increase California's renewable energy supply over the long term.

- **Whether to provide payments for eligible 2002 and early 2003 consumption:** A number of providers continued to serve eligible customers through 2002 and into 2003 with renewable electricity and passed on customer credits, with the expectation that customer credits would be paid. However, the customer credit program was suspended during this period, awaiting passage of SB 1038 and subsequent adoption of this report.

  Based on preliminary accounting, unused SB 90 funds rolled over from 2001 appear sufficient to fund expected payment requests for this period. However, these funds could also be allocated elsewhere.

- **How to re-allocate customer credit funds:** If the customer credit program were discontinued, funds allocated since January 2002 could be re-allocated to other Renewable Energy Program accounts. Alternatively, the program could be suspended indefinitely and re-allocation decisions deferred pending the determination of California's Renewable Portfolio Standard implementation plan, compliance rules,

and direct access market issues. Re-allocation decisions should be considered in the context of the overall demand for Renewable Energy Program funding.

Recommendations

After carefully considering all issues, scenarios, and options, the Energy Commission finds no compelling basis for concluding that continued customer credit funding can or will produce a significant impact on renewable energy development outside of utility procurement. With respect to the customer credit program, the Energy Commission recommends the following actions:

1. Given the present uncertainties, complexity of issues, and timing of Renewable Portfolio Standard implementation, discontinue the customer credit program, and re-allocate annual funding as follows:

   10 percent ($1.35 million) to the Renewable Resources Consumer Education Account
   45 percent ($6.08 million) to the Emerging Renewable Resources Account
   45 percent ($6.08 million) to the New Renewable Resources Account

2. Approve retroactive payments to eligible customers for the period January 1, 2002 through April 1, 2003, at the incentive rate of 1 cent/kWh. The payments should be made from unused Renewable Energy Program funds, authorized under SB 90.

3. Set aside funds within the Renewable Resources Consumer Education Account to support and accelerate scoping, design, and development efforts for the required Renewable Portfolio Standard/Renewable Energy Program generation tracking, verification, and accounting system. These efforts are to be consistent with SB 1078 and Renewable Energy Program requirements.

Customer Credit
Renewable Resources Account
Report to the Governor and the Legislature

Chapter 1: Background and Overview

This chapter covers the background on the customer credit program, including a program overview. As required in SB 1038, the report evaluates whether or not to continue the original customer credit program, which remained in effect from 1998 to 2001. Specifically, the statute requires the following:

> By March 31, 2003, the Energy Commission shall report to the Governor and the Legislature on how to most effectively utilize the funds for customer credits, including whether, and under what conditions, the program should be continued. The report shall include an examination of trends in markets for renewable energy, including the trading of non-energy attributes, and the role of customer credits in these markets. The report will recommend an appropriate funding allocation for the customer credits and how implementation of the customer credits should be structured, if appropriate. [Public Utilities Code Section 383.5 (f)(2)(E)]

On March 3, 2003 the Energy Commission staff held a public workshop to obtain input from the public on the staff draft of the *Customer Credit Renewable Resources Account: Report to the Governor and Legislature* and the future of the customer credit program. Views of the workshop participants varied, from support for continuing the customer credit to discontinuing the program. In general, the Energy Commission recommendations were supported.

The report is divided into the following chapters:

- Chapter 2 provides an overview of the customer credit program and a summary of recent legislation covering both the program and the Renewable Energy Program (REP).

- Chapter 3 examines trends in renewable energy markets and the role of customer credits in these markets, focusing on California's direct access market, the Renewable Portfolio Standard (RPS) in California, and the trading of renewable energy certificates nationally.

- Chapter 4 provides the Energy Commission's assessment of options for effectively using customer credit funding in the context of the changing market structure and rules for renewable energy suppliers and customers.

- Appendix 1 provides information on obtaining a copy of the XENERGY contracting team's report, *Customer Credit Account Research and Analysis Supporting the California Energy Commission's Renewable Energy Program Preparation of the Customer Credit Account Report for the Legislature,* which includes XENERGY's compiled research and analysis. The contracting team's report provides the information base for much of Chapter 3.

- Appendix 2 is a copy of a March 8, 2002, Energy Commission staff letter to participants of the customer credit program.

A glossary and endnotes are included at the end of the report.

Chapter 2:
Program Overview and Recent Legislation

This chapter provides an overview of the customer credit program from 1998 to 2001 and discusses the impacts of recent legislation and SB 1038 requirements on the customer credit program.

The Customer Credit Subaccount, 1998–2001

Under SB 90, the Subaccount was designed to reduce the premium that customers paid for renewable energy and thus stimulate market demand, while simultaneously helping to build a renewable market infrastructure to facilitate consumer choice. (For more details, please see the December 2002 *Annual Project Activity Report to the Legislature* and similar reports from 2001 and 2000[3], and *Volume 4: Customer Credit Subaccount Guidebook (6th Edition)*[4], which contains the guidelines governing customer credit eligibility and funding at the end of 2001.)

The $75.6 million allocated to the Subaccount under SB 90 offered customers financial incentives to purchase renewable energy via renewable energy products. By passing the credit along to their customers, eligible renewable providers could compete with conventional electric service providers (ESPs). The program involved many players, including direct access customers, electric service providers, and renewable energy generators and wholesalers.

The customer credit was essentially a financial incentive in cents/kilowatt hour (kWh) for eligible renewable electricity purchases. The Energy Commission distributed available funds to registered renewable providers who delivered eligible energy to qualifying customers. The ESPs passed these funds on to their customers, based on the customer's electricity consumption. Eligible customers were those residing within the following investor-owned utility (IOU) service territories:

- Pacific Gas and Electric Company (PG&E)
- Southern California Edison Company (SCE)
- San Diego Gas & Electric Company (SDG&E)
- Bear Valley Electric Service Company

The only eligible customers were those who participated in the direct access market and purchased energy from a registered renewable provider instead of their default utility distribution company.

To become eligible for the customer credit, ESPs registered themselves and their eligible products with the Energy Commission. A renewable energy product was typically a mix of renewable energy and generic or system power, with only in-state renewable generation eligible for the customer credit.[5] Wholesalers or power pools could also register with the Energy Commission to become registered renewable wholesalers and sell electricity to eligible providers, although they were not eligible for funding.[6]

Customers were categorized into three separate classes: (1) residential, (2) small commercial, and (3) non-residential/non-small commercial customers (referred to as large customers, this category includes the following classes of customers: large commercial, industrial, agricultural, and public lighting).

The large customers were subject to a cap of $1,000 per customer, per year, and collectively a $15 million cap for cumulative payments from the Subaccount over the duration of the program. When the $15 million cap was reached in April 2001, the funding for large customers ended.

The Energy Commission made monthly payments from the Subaccount to registered renewable providers based on data submitted in monthly performance reports (MPRs). The MPRs included data on the generation source of energy offered by providers and on sales to customers.

The customer credit program was intended to give renewable energy providers a high level of flexibility in determining how best to develop the market and increase their ability to attract customers. Providers had the freedom to use co-op structures, marketing agents, or other innovative approaches for selling renewable power, such as green tags or renewable energy certificates.

Number of Customers and Providers

Figure 1 shows the total number of customers receiving the customer credit from 1998 through 2001. The market peaked in mid-2000, with the number of customers purchasing renewable energy hitting a high of 216,372 in May 2000 and purchasing a record 261.7 million kWh in August 2000.

One year later, in the summer of 2001, however, fewer than 71,000 residential customers were served by direct access providers and receiving customer credits, demonstrating the large impact of the high electricity prices and regulatory uncertainty that began in late 2000 and ultimately led to the suspension of direct access.

Another important indicator of market activity is the number of registered providers, compared to the number of registered providers actively serving customers. Providers can maintain registration status without actively serving customers, as illustrated in Table 1.

Figure 1
Number of Customers Receiving Customer Credits

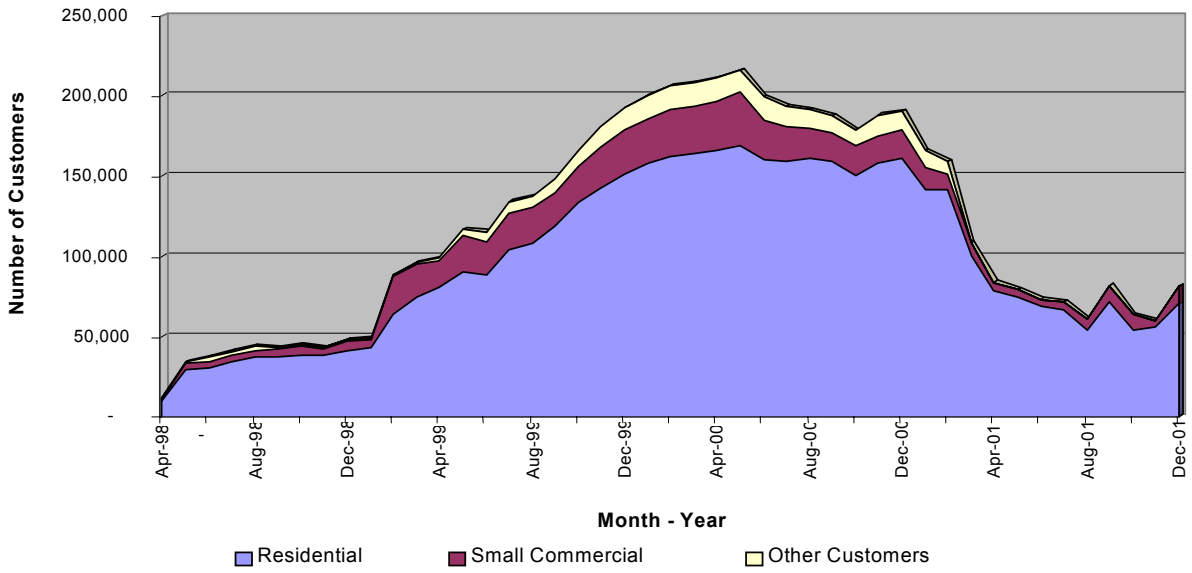


Table 1
Registered and Active Renewable Providers

Year Ending	Number of Registered Providers	Number of Providers Active in Market
December 1998	13	3
December 1999	21	11
December 2000	29	18
December 2001	29	5

In 2000, the number of active providers in the market peaked, reflecting the growth until then of market activity. By 2001, activity declined. As of December 2001, when payments from the Subaccount were suspended, a total of 29 providers were registered in the customer credit program and were offering 48 registered renewable energy products. However, only five providers were active, and most of these had returned a large portion of their customer base and energy load to the default utility by that time. Renewable providers left the market for a variety of reasons, stemming from the high wholesale energy prices at the end of 2000 and the manner in which these high prices were factored into pricing policies for the direct access and bundled service markets. Some providers also left the market, or returned some of their

customers to their default utility, in response to the end of customer credit funding for large customers.

Another useful way to consider Subaccount activity is to compare the number of customers purchasing electricity that qualified for the customer credit with the number of customers choosing direct access. Customer participation in the direct access market has been minimal since its inception in April 1998; the percentage of all customers who had the option to choose direct access peaked at only 2.2 percent. However, by August 2000, 92 percent of those direct access customers purchased electricity that qualified for the customer credit.

Renewable Generation Supply and Demand

To date, the electricity eligible for customer credit has been generated by geothermal, biomass, small hydro, landfill gas, and some wind facilities. Table 2 shows the relative percentages of fuel types used to produce electricity that was eligible for customer credit from the beginning of the program in April 1998 though 2001. Generation data were aggregated for all active providers and products.

Table 2
Eligible Generation by Fuel Type

Calendar Year	Geothermal	Biomass	Small Hydro	Wind	Landfill Gas/Other	Total
1998	82%	8%	10%	0%	0%	100%
1999	79%	16%	3%	2%	0%	100%
2000	77%	16%	3%	2%	2%	100%
2001	88%	8%	1%	2%	<1%	100%

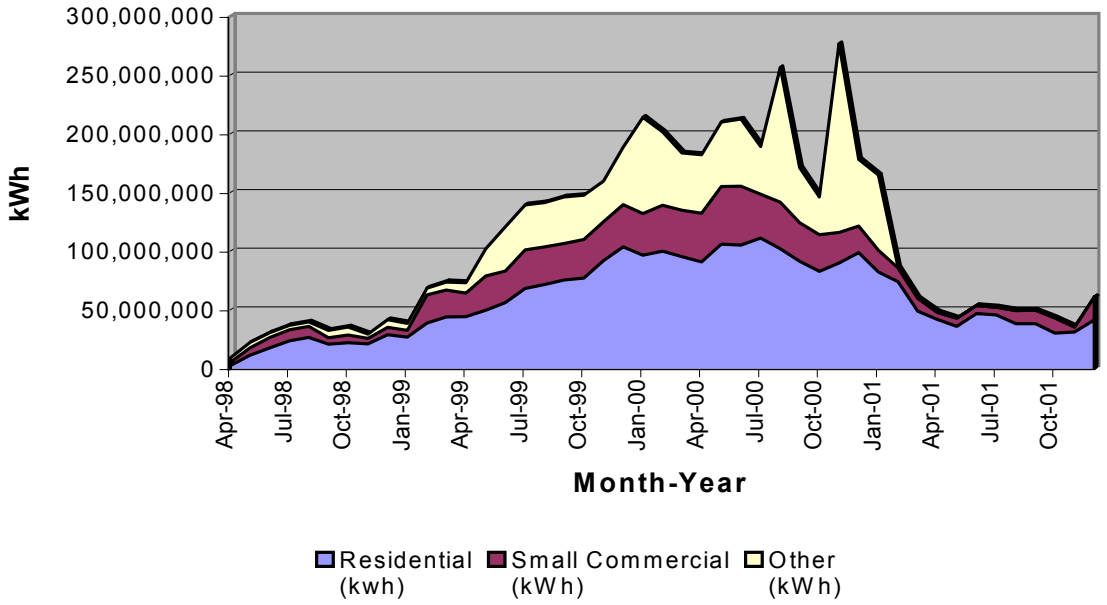
In 2001, geothermal energy dominated the renewable energy market and accounted for 88 percent of eligible purchases. The predominance of geothermal was partially attributable to the decrease in the number of active providers, as those that remained in the market relied almost solely on geothermal purchases.

From April 1998 to January 2000, the amount of renewable electricity delivered to customers eligible for customer credits steadily increased. Then in January 2001, the market underwent sharp fluctuations followed by a steady decline in activity, as shown in Figure 2.

The volatility evident for large customers, in particular, was a result of various factors, but the volatility typically reflected large customers having met the $1,000 annual cap on payments. In April 2001, the $15 million cumulative cap on payments allowed for large customers was met, after which time this particular class of customers was no longer eligible for customer

credits. Consequently, payments from April 2001 through December 2001 were made only for residential and small commercial customers.

Figure 2
Load by Customer Class



Since mid-2000, Subaccount activity has declined, as indicated by the number of customers receiving customer credit, the amount of customer credit funds received, and the amount of eligible renewable electricity consumed.

Expenditures

For payments during 1998–2001, registered renewable providers submitted monthly data to the Energy Commission on eligible generation and sales to consumers, which were used to calculate payments from the Subaccount. An important factor in the payment calculation is the cents/kWh credit level.

At the start of the program, the Energy Commission set the credit level at the program's maximum amount of 1.5 cents/kWh to encourage market development. In the program design, the Energy Commission envisioned a declining credit level as growth in demand for the customer credits approached budget limitations. To provide market stability, however, the credit level was to be held constant over six-month timeframes, and declined if necessary at the end of these periods.

In late 2000, market growth led the Energy Commission to reduce the credit level for the next six-month period to remain within budget limits. Further growth would have caused a further

decline in the credit level, but the reduction in Subaccount activity since December 2000 allowed the credit level to remain constant at 1 cent/kWh for the duration of the program while keeping expenditures within the program budgets.

Monthly disbursements were very volatile during the years 2000 and 2001, but decreased considerably in 2001. Changes in the market, along with no payments to large customers, resulted in the Subaccount becoming under-subscribed in 2001. In view of the significant increase in the Emerging Renewable Resources Account activity, the Energy Commission re-allocated $10 million in funds from the Subaccount to the Emerging Account in September 2001.

Table 3 summarizes the Subaccount financial activity for 1998 through 2001, indicating a balance of $6.7 million remaining at the end of the four-year program. Total payments from the Subaccount are lower than customer credits passed on to customers because some providers banked customer credits that were ineligible for payment until matching amounts of eligible generation had been purchased.

Table 3
Financial Summary

Payment Year	Payments ($ millions)	Allocation ($ millions)	Funds Remaining ($ millions)
1998	2.5	10.8	8.3
1999	16.2	16.2	8.4
2000	26.9	21.6	3.1
2001[1]	12.0	27.0	18.1
2002[2]	1.4	0	6.7

[1] In September 2001, $10 million was transferred from the Customer Credit Subaccount to the Emerging Account.
[2] Because of the lag time between when registered renewable providers serve their customers and when they invoice the Energy Commission, 2002 payments to date reflect sales by providers for electricity consumed in 2001.

Subaccount Activity and Status

The retail market for renewable electricity has been contracting, as shown by the fall in the number of customers receiving the customer credit, reflecting the decrease in the amount of renewable electricity consumed and expenditures from the Subaccount. Changes in the market, particularly the suspension of direct access, make new demands for program funding unlikely, at least in the near future. Additionally, with the suspension of direct access in September 2001, no incremental customers may select renewable energy offerings and take advantage of the credit; hence, the growth of the renewable energy market has ceased, and as ESP leave the market, California's renewable energy market is suffering a slow attrition.

During 2002, the direct access market continued to decline in response to California's energy crisis, and activity in the customer credit program slowed proportionately. However, the structure for implementing the program had remained relatively unchanged through December 2001. The Energy Commission did not make customer credit payments on 2002 activity because of uncertainties over potential changes in statute that could modify eligibility requirements for customer credits. While the number of customers and providers participating in the program has decreased, some customers continued to receive renewable electricity from registered ESPs throughout 2002 with the expectation that customer credits would be extended through pending legislation. This expectation was supported by an Energy Commission staff letter to program participants in March 2002 (see Appendix 2).

Monthly performance reports have not been received for the entirety of 2002 activity, as payments were not authorized for this time period. Complete data are unavailable on the number of customers who remained in the market in 2002 and who purchased energy available for customer credits are unavailable. The staff's preliminary accounting for 2002 activity forecasts over $5.4 million in payment requests for residential and small commercial customers and $8.8 million for large customers.

Recent Legislation

In September 2002, Senate Bill 1078 (SB 1078, Sher, Chapter 516, Statutes of 2002) established an RPS in California. SB 1078 requires IOUs to increase their procurement of renewable energy resources by at least one- percent per year so that 20 percent of their retail sales are from eligible renewables by 2017. Pursuant to SB 1078, the Energy Commission is collaborating with the CPUC and other agencies to develop eligibility requirements for certifying renewable facilities, create a system for tracking renewable energy purchases and sales, verify utility procurement compliance, and cover a determined above-market cost for renewable purchases by utilities[7].

In September 2002, SB 1038 incorporated the recommendations of the *Investment Plan* and authorized the Energy Commission to continue implementing the REP for the next five years and distribute the Renewable Resources Trust Fund (RRTF) monies collected under the Reliable Electric Service Investments Act (RESIA). SB 1038 allocates 10 percent of these funds, or $13.5 million annually, to provide incentives to customers who entered into a direct-access transaction on or before September 20, 2001, for purchases of electricity produced by registered, in-state, renewable electricity-generating facilities.

SB 1038 Program Requirements

SB 1038 specifically requires that customer credits be awarded to California retail customers located in the service territories of electrical corporations, which are subject to the collection of RESIA funds under Public Utilities Code Section 381. In addition, the legislation also calls for the following:

- Customers must purchase eligible electricity through direct access transactions that are traceable by an auditable contract trail or equivalent, providing commercial verification that the renewable attribute has been sold once and only once to a retail customer.

- Credits may not exceed 1.5 cents/kWh. Each large customer (defined as any nonresidential, non-small-commercial customer) is capped at $1,000/year, and as a class, they may not receive more than 20 percent of the total funds allocated to the Account. The Account contained a cumulative total of $13.5 million for the first five years, or $2.7 million annually.

- Customer credits may not be awarded to purchase electricity that is used to meet the obligations of a RPS.

Chapter 3:
Status and Trends in Renewable Energy Markets

This chapter covers the current status and outlook for consumer choice in California's competitive renewable energy market with the emphasis on three areas: the direct access market, the implementation of California's RPS, and tradable renewable energy certificates (RECs).

Direct Access Market

On February 1, 2001, Assembly Bill 1X directed the CPUC to suspend the right of retail end-use customers to purchase energy, renewable or otherwise, from direct access contracts, but did not specify the suspension date (AB 1X, Keeley, Chapter 4, Statutes of 2001). After AB 1X passed, the CPUC continued to honor direct access service requests and allow new customers to sign direct access contracts with providers. Most direct access service requests, however, were requests to return customers to their default utility.

In the summer of 2001, the percentage of load served by direct access providers increased substantially from a low of about 3 percent during the energy crisis in early 2001 to about 14 percent of IOU load. The increase came mainly from large commercial and industrial customers who chose lower-priced electricity options in preference to the electricity offered by the IOUs under the higher rates authorized by the CPUC in 2001. Historically, these customers did not participate in the customer credit program to the extent that residential customers did, in part because their ability to do so was limited by statute. Therefore, Subaccount participation did not increase when direct access surged.

On September 20, 2001, the CPUC suspended the direct access market so that new customers could no longer enter into direct access contracts.[8] On March 21, 2002, the CPUC confirmed that September 20, 2001 was the suspension date and discussed applying a potential exit fee or direct access surcharge for customers who had entered direct access contracts before the suspension date. The CPUC's decision also contained some key rules for the direct access suspension: direct access contract assignments and renewals were allowed, as were customer moves, but add-ons of new load under existing contracts were not.

The CPUC also took the following actions in three related proceedings that affect direct access customers, particularly at the level of direct access customer surcharges:

- D.02-07-032, Southern California Edison Company's (SCE) Historical Procurement Charge Interim Decision [9]
- D.02-11-074 (replacing D.02-10-063), Department of Water Resources (DWR) Bond Surcharge Calculation Methodology Decision[10]
- D.02-11-022, Direct Access Cost Responsibility Surcharge (Exit Fee) Decision[11]

The Exit Fee Decision established a rate cap for direct access customers inclusive of all charges, including Southern California Edison Company's (SCE) Historical Procurement Charge and the Bond Surcharge. Initially, that cap has been set at 2.7 cents/kWh. The CPUC expects to reevaluate the level of the cap by July 1, 2003.

To date, those customers with contracts in place before September 20, 2001 may continue to be served through the direct access market. The CPUC has maintained a policy that the direct access market should remain viable,[12] consistent with the intent of AB 1X that contracting for direct access be suspended rather than undermine customer choices made prior to suspension. However, for participants in the customer credit program to use or exceed the 10 percent allocation in SB 1038, either direct access must be reinstated or Account eligibility rules must be adjusted. Either option would require legislative action.

Before legislative action is taken, the CPUC will determine, to a great extent, the potential for growth in the competitive retail market and any subsequent demand for funds in its procurement proceeding, R.01-10-024. This proceeding addresses the utilities' long-term procurement plans, and several factors will undergo consideration. The scale and length of the DWR and other long-term contracts will dictate the load reductions available to utility bundled service without additional stranded costs. Energy efficiency, demand response, distributed generation, and direct access contracting may all effectively compete for load expansion opportunities.

It is difficult to predict the future level of direct access load without a clear resolution of direct access market rules, eligibility, and fee structures. The difficulty is exacerbated by the generally confidential nature of direct access contracts and the unknown implications of California's RPS program on direct access customers and suppliers. Depending on the outcome of CPUC decisions on exit fees, and other issues, and of legislative decisions on electricity market structures, direct access customer demand could diminish further or it could expand. Legislative changes could also expand the eligibility of larger direct access customers to receive customer credit funds.

Direct Access Load Could Diminish

The future level of direct access load is not predictable because the basic economics of direct access remain unclear. Regarding potential reductions, the CPUC has ordered a cap on exit fees, but the level of the cap will be reevaluated by July 1, 2003 and could increase. Even at the current cap level, some contracts may prove uneconomical and drive customers to return to bundled utility service. In addition, the CPUC is reviewing the procedures for calculating the credit level that direct access customers receive from the utility for avoiding generation procurement, which could have a positive or negative impact on the economics of direct access customers. The CPUC is also considering other changes to programs and tariffs, such as the demand response proceeding (R.02-06-001), which could draw direct access customers back to utility bundled service.

Direct access eligibility rules related to the suspension of contracting also remain contested. For example, total direct access load is guaranteed to decline over time as some customers move out of a service territory, close a business location, or otherwise cease service. However, some parties are now in the process of attempting to persuade the CPUC to allow a customer with a business as in several locations to transfer the direct load from a business that shuts down to another of its business sites that does not have direct access set of locations to replace direct access load that ceases service with load from another location without a direct access contract.

Demand for customer credit funds could dwindle to zero if exit fees or other rules drive existing eligible customers back to utility bundled service.

Direct Access Load Could Expand

Direct access could expand to a broader group of retail customers as a result of several factors, including revoking direct access suspension; implementing the Community Aggregation Bill, Assembly Bill 117 (AB 117, Migden, Chapter 838, Statutes of 2002); or reopening direct access in full or partial form by new legislation.

- **Revoking direct access suspension:** Many customer representatives are pushing to continue direct access[13] for retail customers or proposing alternative programs to expand customer choice. Depending on decisions at the CPUC or the Legislature, large customers may be offered direct access choice again while smaller customer classes may not. Currently, large customers have access to customer credit funds but are limited in total funding, and limits on the funds per customer per year may persist. The demand for funds could increase if caps are relaxed on the annual funding per large customer and the limit on total funds going to the large customer category.

- **Implementing the Community Aggregation Bill:** AB 117 has spurred interest from small customer advocates seeking alternative electricity choices. This bill authorizes multiple end-use customers to aggregate their electrical loads and purchase energy from an ESP through community choice aggregators as members of a local community (exit fees may apply).

  As an example, the Northeast Ohio Public Energy Council,[14] an aggregation comprising about 400,000 residential customers, competitively procured electric service and is being served with a cleaner energy blend than the default service offered by the utility.

  California's Customer Credit Renewable Resources Account was set up to focus resources on small end-use customers, and when AB 117 is implemented, growth in demand for customer credit support could be strong, should adjustments be made in eligibility rules to allow it. The Account could serve as a stimulus for community aggregation around renewable energy choices. This option suggests a strategy to reserve funds or defer allocation decisions pending CPUC findings and decisions.

- **Reopening direct access:** The Legislature will determine whether and when to adjust statutory eligibility requirements for customer credits. Adjustments in customer eligibility, driven by changes in direct access rules, could quickly and sharply increase the demand for some form of customer credit support.

In these expansion cases, however, SB 1038 will continue to limit customer credits to direct access customers with contracts before the suspension date. Thus, changes in section 383.5 of the Public Utilities Code would be required to expand eligibility to these potential new direct access customers.

Demand for Customer Credit Funds

Within any particular level of direct access load, participation in the Account could increase substantially if all current direct access customers purchased enough eligible renewable energy to take full advantage of their legal ability to receive customer credits. If participation continued at the same level as at the end of 2001, the Account would disburse over $5 million per year, mostly to residential customers.

If the customer credit program were extended, participation would increase because all existing direct access customers who were eligible to participate would do so; then payments from the Account would surge until the large customers reached their legal limit of $13.5 million from the Account. This level of participation would represent on average over $8 million per year in Account payments.

In addition, the funding limits set in SB 1038 are further subject to interpretation. SB 1038 limits eligibility for customer credits to customers who entered into a direct transaction on or before September 20, 2001, for purchases of electricity produced by registered in-state renewable electricity generating facilities.

One interpretation of this language is that only customers who had direct access contracts specifying eligible renewable resources can participate in the Account. In this case, Account participation is capped at current levels and likely to decrease over time as customers move out of a service territory or otherwise drop their service. An alternate interpretation of the language is that any customer with a valid direct access contract before the suspension date can purchase eligible renewable power and participate in the Account. In this case, the current level of demand could increase in 2003 subject to the interaction between the other participation limits in the bill and the current makeup of direct access customers.[15]

California's Renewable Portfolio Standard

SB 1078 created California's new RPS, which requires retail sellers of electricity to increase the renewable content of their energy sales by a minimum of one percent of retail sales per year beginning in 2003. The requirement of an annual increment continues until renewable energy comprises 20 percent of the energy portfolio, a target that must be achieved by

December 31, 2017. To achieve this target, retail sellers must stimulate new investment in renewable energy resources, either by third-party, non-utility developers who contract for energy deliveries, or by the retail sellers themselves (direct investment).

The keys to meeting the RPS target will be market price referents that the CPUC adopts, the availability of PGC funds, policies that the Energy Commission adopts to guide their allocation, and the costs of available renewable resources.

Because the RPS creates an obligation to procure renewable energy that depends in part upon the availability of PGC funds, one implication of the RPS may be that less PGC funds will be available for the customer credit program. The RPS *obligation* may also be said to replace the *choice* to purchase renewable power that was fostered by the customer credit program, in effect reducing the need to have customer choice of renewable energy supported by the customer credit program. Finally, the SB 1038 prohibition on using Account funds to support purchases of RPS-related renewable energy reduces the pool of renewable resources available for use in an ongoing customer credit program.

Utility Procurement of Renewables

For the IOUs, the CPUC's Procurement Rulemaking, R.01-10-024 will guide procurement of renewables. The CPUC, in collaboration with the Energy Commission, has initiated a phase of the Procurement Rulemaking that addresses key RPS protocols. Among the issues the agencies are addressing are the following:

- A process to provide criteria for rank ordering and selecting least cost and best fit renewable resources.

- Flexible compliance rules and penalties for noncompliance.

- Standard terms and conditions to be used by utilities in contracting for renewables.

- A process for determining market price referents. This set of 'benchmarks' will delineate how much PGC funds are necessary to support development of any particular renewable facility.

The Energy Commission, in collaboration with the CPUC, has initiated a companion proceeding, 03-RPS-1078, that will address the following aspects of the RPS:

- Certification of the eligibility of renewable resources for RPS purposes.

- Allocation and disbursement of PGC funds for renewable resources that qualify for PGC support.

- Design and implementation of a tracking and verification system to ensure that renewable resources are accounted for appropriately.

The largest procurement of renewable resources because of the RPS, at least initially, will come from the IOUs. Hence, the potential demand for RPS-related PGC funds is greatly influenced by the rules that will be established in these companion proceedings. High demand for PGC funds because of rules established for utility RPS procurement implies that less funds will be available to support a customer credit program.

Other Retail Seller Procurement of Renewables

SB 1078 also directed the CPUC to open a rulemaking to develop RPS requirements for Community Choice Aggregators (CCAs) and ESPs. The rules eventually developed in this proceeding will especially influence the viability of customer-driven demand and, hence, the effective use of Account funds.

The customer credit program in the past provided incentives for customers of ESPs to choose to purchase renewable energy. The RPS will, in part, require purchases of renewable energy that the ESPs previously purchased with customer credit program support. SB 1078 prohibits use of customer credit funds to support these required purchases of renewables. Consequently, much of the renewable energy previously supported by the Account may no longer be supportable.

This process may affect how the Energy Commission allocates PGC funds and tracks generation output. ESPs may not be as likely to sign long-term contracts necessary to develop new renewable resources, depending more on existing resources and short-term purchases to meet their obligations. In this circumstance, a viable tracking system using tradeable renewable energy credits assumes increased importance.

Tradable Renewable Energy Certificates

A growing trend in renewable energy markets is the trading of renewable energy attributes (RECs) separately from the underlying energy. In this report, the term REC is used in its broadest definition to mean simply the attributes of a given unit of renewable generation, separated from the underlying electrical energy.

RECs allow the renewable energy attribute to be separated in time and geographic location from the electricity that is produced, providing more flexibility for generators and retail providers. Tradable RECs have been used in California and in other states. In California, tradable RECs have been accepted at the wholesale level in the customer credit program as well as the Power Source Disclosure program. In other states, RECs have been used to meet RPS obligations. RECs are also being sold at the retail level across the nation.

RECs represent the separable bundle of non-energy attributes – environmental, economic, and social – associated with generating renewable electricity. A REC is created for every unit of renewable electricity output (usually denominated in megawatt-hours, or MWh), and no more than one REC can be created for any given unit of generation. This ability to separate the renewable attribute from the delivery of electricity provides many benefits.

Renewable generation is generally less 'dispatchable' – that is, it generally cannot be generated in a pattern that matches a provider's or the system's need for power at a specific time. Some renewable resources are intermittent, meaning they are only able to generate when the resource they use, such as wind, is available. With RECs, a retail seller could purchase the renewable attributes from a facility and not have to match the generation from that facility with demand they serve at a specific time. Compliance with the RPS, power source disclosure, or customer credit requirements is a simple matter of demonstrating that the retail seller owns sufficient RECs. Similarly, a retail seller could purchase RECs from a facility that geographically is located so that transmission to the retail seller's load is difficult or expensive.

Renewable Energy Certificates as An Accounting Mechanism

Tradable RECs, also referred to as green tags or green tickets, are used throughout the world for two primary purposes: (1) as an accounting mechanism to verify compliance with renewable energy or air quality mandates and (2) as a commercial mechanism that allows more liquid trading of renewable energy attributes separate from the commodity energy generated by a renewable power plant. In both cases, a REC creates a unique and easily verifiable claim to renewable generation attributes. By tracking a REC through intermediate transactions from the renewable generator to the distribution utility, state regulators can easily determine whether a load-serving or distribution utility has met its renewable energy mandate.

SB 1078 gives the Energy Commission the authority and responsibility to design and develop an accounting system to track RPS compliance, to prevent double-counting of renewable energy output, and to verify product claims inside or outside the state. The RPS accounting system is also expected to be used for verifying retail product claims in California or other states as needed, overlapping with the Energy Commission's existing mandate to implement Senate Bill 1305 (SB 1305, Sher, Chapter 796, Statutes of 1997). Under consideration by the Energy Commission are compliance options such as the use of tradable RECs and inter-year banking. Both of these options have been allowed in the past by the Energy Commission in the customer credit program. Tradable RECS have also been used in the Power Source Disclosure program.

Renewable Energy Certificates Sold To Retail Customers

Besides being used as an accounting mechanism or wholesale trading mechanism, RECs may be sold at the retail level to allow customers to show support for renewable energy. An important factor contributing to the growth of retail RECs is the recent availability of programs and certification opportunities that encourage RECs as a legitimate way to support renewable energy and provide positive environmental benefits. The Center for Resource Solutions, an independent not-for-profit organization that certifies green power products, now certifies green tags (RECs).[16] Customers in all states have access to retail RECs from about a dozen companies. Additionally, some federal agencies are supporting the use of retail RECs to verify support of renewable energy purchases.

Today, California customers can buy retail RECs in small volumes from a variety of vendors. Because RECs can be sold separately from commodity electricity, a customer can remain with bundled utility service and still buy RECs to support renewable energy. Thus, expanding the products eligible for Account funds to include retail RECs would not require changes to direct access rules and could increase California's demand for renewable energy. Such action, however, would require legislative changes to Account rules, as funds are currently only available for direct access transactions.

Whether or not retail RECs vendors are drawn to California depends on the CPUC and Legislature resolving major regulatory uncertainty in the electricity market generally and in the renewable energy markets specifically, and on customer credit funds being made available to support RECs sales in California. A key regulatory issue for retail REC vendors is the development and implementation of a registry and accounting system for renewable energy in California.

National and Regional Tracking Initiatives

RECs can be generated and claimed by any renewable generator inside or outside an official system. A central registry, or issuing body, ideally generates official certificates, electronically or on paper, assigning property rights to the generator for the RECs. Because RECs are intangible, a central registry allows the meter data from facilities to be verified independently and confirm electricity generation and thus generate the certificate. The registry also creates a unique identification code for each certificate to verify that certificates are not sold in multiple locations. The registry, or another entity, may serve as a repository of "retired" or "consumed" RECs, as well as a clearinghouse or trading platform for REC purchases and sales.

RECs are a convention in the wholesale and retail renewable energy markets. The vast majority of wholesale renewable transactions today include a REC transaction. All registered wholesale renewable transactions in Texas and New England employ RECs, as have the majority of wholesale renewable transactions in the mid-Atlantic and Pacific Northwest regions, which have been dominated by wholesale tag players like Community Energy, PacifiCorp Power Marketing, and Bonneville Environmental Foundation.

Presently, eight states use or plan to use RECs for RPS compliance purposes: Arizona, Nevada, Texas, Massachusetts, Maine, Connecticut, New Jersey, and Wisconsin. The Texas and New England systems are currently the most well developed and advanced of these systems. Other countries have developed RPS policies – such as Australia, the United Kingdom, Italy, and Belgium – and these countries have universally turned to REC systems to monitor and verify compliance with those policies.

One example is the Electric Reliability Council of Texas, which tracks and verifies tradable renewable certificates (TRCs) that may be used to meet the state's RPS obligations. A robust retail TRC market is also functioning in Texas in parallel with the state's mandated RPS.

A second example is in the New England region, where the New England Generation Information System tracks and verifies certificates that are used to meet the renewable claim obligations of participating New England states. The tracking and verification systems implemented by the states and regions are designed not only to ensure that policy objectives are attained, but also to help to establish credibility and provide consumers with confidence that renewable electricity claims are not fraudulent. (Appendix 1 describes in detail the systems developed for both Texas and the New England region.)

The U.S. EPA is funding work to establish a North American Association of Issuing Bodies (AAIB), which is to include establishing a governance structure for the AAIB and developing agreements governing the interaction of the issuing bodies with the AAIB and with each other to ensure compatible information transfer. Such coordination is required to confirm that RECs independently retired in one system are not also being retired in another system.

The Energy Commission is participating in the Western Governors' Association process to establish a comprehensive Western RECs system to match the Western Electricity Coordinating Council (WECC) electricity market territory. A formal infrastructure to use and trade RECs within the western states will be vital to California's accounting and compliance requirements under the RPS.

Utility-Billed Competitive Green Pricing Options

Competitive green pricing option programs operate in regulated markets in which competing green power offerings are made available by and through the utility and are invoiced through the utility bill. These contrast with the REC options in which the attributes associated with green power are purchased by customers independent of their electricity purchase (and paid for via a separate bill). The latter options can suffer from their disconnection from electric service; the purchase of a green tag may be perceived as akin to a charitable contribution rather than a product or service purchase. As a result, marketers have a greater educational burden and most observers expect mass-marketed retail REC products to have a lower market penetration than a product offered in association with the purchase of electricity and invoiced through the electric bill.

Two jurisdictions have variations on the hybrid approach of utility-billed green pricing programs: Oregon and the Niagara Mohawk Power Company service territory in upstate New York. Under both programs, customers are offered multiple green power choices from multiple vendors, in a utility and regulator authorized process, supported by marketing services provided by the distribution utility, and billed via the distribution utility bill.

In California's situation, a hybrid green tag/green pricing approach could be used to support the customer credit program under direct access. This approach could provide a mechanism to continue support to customers currently purchasing renewable energy, and to either assist in the re-opening of the direct access market or offer a substitute if direct access is not re-opened. Expanding product eligibility to encompass competitive green pricing would require

statutory change and alter the fundamental concept and design of the customer credit program.

Appendix 1 describes competitive green pricing alternatives in more detail and how the customer credit program might be applied to such a program.

Chapter 4:
Options and Recommendations

The Energy Commission considered several options for effectively using customer credit funds to meet SB 1038 objectives.

Options for Effectively Using Credit Funds

The various options for the customer credit program are categorized into three principal areas:

- Whether to continue or discontinue the customer credit program
- Whether to provide payments for eligible 2002 and early 2003 consumption
- How to re-allocate customer credit funds

Whether to Continue or Discontinue the Customer Credit Program

This choice depends on the perception that continuing the program has a high or low potential to increase California's renewable energy supply over the long term.

If the perception is one of high value, then continued funding is justified, either consistent with current direct access rules and the limitations of SB 1038 or subject to adjustments in customer, product, and supplier eligibility. Continued support could restrict customers to purchases from eligible suppliers of *new* renewable generation only (and generation in excess of that required by the RPS).

Various adjustments could be proposed that would help use the funds most effectively, including:

- Continue the program as is, supporting existing direct access customers at a level equal to the funding cap on the Existing Renewable Resources Account or 1 cent/kWh, until direct access suspension is revoked or modified.
- Beginning in January 2003 (or other date), restrict customer credit funds to purchases from new renewable energy sources.
- Relax funding limits for large customers to support expanded demand for renewable energy among existing direct access customers.
- Adjust customer eligibility rules to respond to changes in direct access or RPS implementation (for example, rules for ESPs and community choice aggregators).

- Adjust product eligibility rules to expand support to retail RECs and allow RECs to qualify for customer credits directly (or through utility program).

Alternative programs to support customer demand for renewable energy could be considered, replacing the current structure of the customer credit program. These options involve support for developing and expanding the renewable energy market, (in excess of the RPS requirement) by of supporting either the developing green tags market in the absence of direct access or one or more competitive green pricing options available through the distribution utility's billing.

Customer credit program eligibility requirements could be redefined to support the (limited) use of retail RECs directly in the absence of direct access. Eligibility could be restricted to purchasing new renewable generation only and not credited to RPS obligations. Utility-billed, competitive green pricing programs could be supported under a redefined customer credit program.

Any of these options would require statutory changes.

Discontinuing the credit program would be the recommended option, if the perception is one of numerous uncertainties and a lack of evidence that the program has the potential to increase California's renewable energy supply over the long term. This option is justified by the following:

- During the initial four-year program, customer credits provided limited indirect support to renewable energy generators.

- Continued customer incentives cannot be demonstrated to be a cost-effective strategy or market tool having significant impact to drive new resource development at present or in the longer term.

- The Energy Commission has no basis for determining that customer credits will be more effective at supporting renewable resource development than an equivalent amount of funds provided in the form of SEPs to support the RPS.

By ending the program, the Energy Commission would cease further direct encouragement of the retail renewable energy market. The consequences are likely to include the disappearance of retail marketing of renewable energy to several customer classes.

Whether to Provide Payments for Eligible 2002 and Early 2003 Consumption

A number of providers continued to serve eligible customers through 2002 and into 2003 with renewable electricity and passed on customer credits, with the expectation that customer credits would be paid. However, the customer credit program was suspended during this period, awaiting passage of SB 1038 and subsequent adoption of this report.

Though based on the staff's preliminary accounting of 2002 activity, funding requests for payments to residential and small commercial customers are projected at $5.2 million. Payments to large customers are excluded, given that the $15 million cumulative cap on payments for this class of customers was met in April 2001.

Based on preliminary accounting, unused SB 90 funds rolled over from 2001 appear sufficient to fund expected payment requests for this period. However, these funds could also be allocated elsewhere.

How to Re-allocate Customer Credit Funds

If the customer credit program were discontinued, funds allocated since January 2002 could be re-allocated to other REP Accounts. Alternatively, the program could be suspended indefinitely and decisions to re-allocate the funds deferred, pending California's RPS implementation plan, compliance rules, and direct access market issues.

Re-allocation decisions should be considered in the context of the overall demand for REP funding. Presently, the three REP accounts listed below may have demands for funds beyond their current allocations:

- The Emerging Renewable Resources Account had demand significantly greater than allocation of funds for the last two years, a situation that is expected to continue.

- Demands for increased funds may occur in the New Renewable Resources Account, but the level of that demand cannot be forecast until the rules are developed for RPS procurement. While the sufficiency of the New Renewable Resources Account funding is not known, these funds hold the potential of meeting RPS requirements for new renewable energy development.

- The Renewable Resources Consumer Education Account is charged with promoting renewable energy, disseminating information on renewable energy, facilitating consumer awareness and confidence in renewable energy sources, and helping to develop a consumer market for renewable energy. Additional funding in this area may be necessary to foster confidence in the RPS.

As such, funds could be re-allocated to support the remaining customer-side accounts: the Emerging Renewable Resources Account, the Renewable Resources Consumer Education Account, and to the New Renewable Resources Account to ensure adequate support for new renewable energy resources.

In conjunction with demands for funding from the REP Accounts, particularly the New Renewable Resources Account, the California RPS creates an immediate need for funds to support the design and to develop an integrated tracking, accounting, and verification system, for which the Energy Commission is responsible. An option for the customer credit funds would be to support both the REP and RPS implementation through the design of a flexible

accounting system that meets the RPS generation tracking and compliance requirements (including SEPs through the New Renewable Resources Account). This option would at the same time, anticipate the growing use of RECs trading in California, in step with regional and national initiatives. The accounting system could also be used to verify renewable energy content and heighten electricity customers' awareness of the contribution renewable power makes in their distribution utility's power mix.

A portion of the funds allocated for customer credits could be applied to developing the necessary statewide tracking, verifying, and accounting system, which is designed to serve multiple uses. Funds for the tracking and verifying system could be re-allocated from the Customer Credit Renewable Resources Account to the Renewable Resources Consumer Education Account for this purpose. The accounting system could be designed and used for the following purposes:

- Existing Renewable Resources and New Renewable Resources Account tracking (RPS, REP).
- Verifying generation, sales, claims, etc. (REP (Customer Credit), SB 1305).
- Baseline and compliance accounting (RPS).
- In-state and out-of-state tracking capability (RPS, REP).
- Anticipate introduction and use of wholesale and potentially retail RECs.

California lacks a formal infrastructure to use or track RECs, including how to treat RECs in statewide accounting and utility procurement. This issue will soon be the subject of a joint Energy Commission and CPUC inquiry.

Recommendations

The Energy Commission has examined the history of the customer credit program and analyzed how changes in the direct access market affect the continuation of the program pursuant to SB 1038. The Energy Commission's recommendations are provided below.

Discontinue the Customer Credit Program

Upon examining the trends and status in the direct access market in relation to the customer credit program, the Energy Commission recommends discontinuing the program.

The prospects for a renewal in the direct access market are too uncertain at this time to justify continuing to allocate REP funds for this purpose. The intent of such funding would be to foster a growing market for renewable power, above and beyond the RPS requirements in the state. Without a clear expectation that a growing market for renewable power can be fostered, there is little justification for allocating funds for this purpose. The Energy Commission

believes that, should the program continue, it would be at great risk of not producing its intended effect because of the unclear future of retail direct access and customer choice.

Pay for Customer Credit Program Activity During 2002–2003

On March 8, 2002, the staff distributed a letter indicating that the Energy Commission intended to continue customer credit payments either under the old program structure or through a new program structure to be established pursuant to implementing legislation. Since the Energy Commission is recommending discontinuing the customer credit program, no new program structure is proposed for calculating and making payments. To honor the intent of the March 8, 2002 letter, the Energy Commission recommends that retroactive payments be made for 2002 activity under the SB 90 program structure.

The Energy Commission recommends that payments be made for eligible residential and small commercial consumption of renewable energy for the period January 1, 2002, through April 1, 2003, using the remaining funds in the SB 90 Customer Credit Subaccount. Table 3, in Chapter 2, shows $6.7 million in SB 90 funds remaining. Only residential and small commercial customers are eligible for retroactive payments, since the SB 90 cap on payments for larger customers has already been reached. Payments should be made at the incentive rate of 1 cent/kWh through March 31 or until unused SB 90 funds are exhausted, whichever comes first.

Should the Energy Commission adopt this recommendation, changes to the *Customer Credit Subaccount Guidebook* would be enacted to allow payments in 2002 and January through March of 2003.

Re-allocate SB 1038 Customer Credit Funds

SB 1038 allocated 10 percent of the funds for the REP to the Customer Credit Renewable Resources Account. Should the Energy Commission adopt the recommendation to discontinue the customer credit program, these funds are no longer needed for this purpose. The Energy Commission recommends re-allocating these funds as follows:

- 10 percent (at least $1.35 million annually) to the Renewable Resources Consumer Education Account.

- 45 percent (at least $6.08 million annually) to the Emerging Renewable Resources Account.

- 45 percent (at least $6.08 million annually) to the New Renewable Resources Account.

The Energy Commission recommends the re-allocation of funds for the Renewable Resources Consumer Education Account for a specific purpose: to support and accelerate the scoping, design, and development efforts for the required RPS tracking, verifying, and accounting

system, which is consistent with SB 1078 and SB 1038 requirements. This system would have the purpose of establishing consumer confidence that the renewable generation participating in the RPS, or otherwise in the REP, is verified and is participating in programs and contracts as expected, bringing the benefits of these renewable policies to consumers.

Currently, 17.5 percent of the REP funds, or about $25 million annually, is allocated to the Emerging Renewable Resources Account. In 2001 and 2002, however, rebate reservations for the Emerging Renewable Resources Account funds totaled close to $50 million annually. Even with reduced rebate levels, this account appears to need additional funds. Re-allocating customer credit funds for this purpose can meet this need, providing reassurance to the emerging renewables industry regarding the long-term availability of funds for this purpose.

The New Renewable Resources Account will be developed in 2003 to provide a source of supplemental energy payments (SEPs) for the RPS. Presently, the New Renewable Resources Account is allocated 51.5 percent of the REP funds or about $70 million annually. Whether this level of funding is sufficient or insufficient for meeting RPS obligations cannot be known at this time. Re-allocating customer credit funds to the New Renewable Resources Account will help to ensure that the 20 percent goal embodied in the RPS policy can be achieved as scheduled, contributing to the development of new renewable resources in any event.

The Energy Commission is prohibited by statute from re-allocating any funds to the Existing Renewable Resources Account.[17]

Appendix 1

January 23, 2003 Consultant Report: *Customer Credit Account Research and Analysis Supporting the California Energy Commission's Renewable Energy Program Preparation of the Customer Credit Account Report for the Legislature*

Prepared by the XENERGY Contracting Team

Authors:
Julie Blunden
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To keep printing costs down, the XENERGY consultant report is available on the Energy Commission's website at [www.energy.ca.gov/renewables/documents]. For those preferring a hard copy of Appendix 1, please call the Renewable Energy Program Secretary, Janet Preis, at (916) 654-4530 or e-mail her at [jpreis@energy.state.ca.us].

Appendix 2

March 8, 2002 Energy Commission Staff Letter to Customer Credit Subaccount Participants

(see following page)

CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET
SACRAMENTO, CA 95814

March 8, 2002

To: Customer Credit Subaccount Participants

Please be advised that payments from the Customer Credit Subaccount will be suspended for all load served after December 31, 2001. Sales of renewable electricity after this date that would otherwise qualify for the customer credit are expected to be eligible for payments under an extension to the Commission's Renewable Energy Program.

Assembly Bill 995 and Senate Bill 1194 authorized extending the program with modifications, but legislation authorizing the expenditure of funds collected under the extension has not been passed. In addition, certain eligibility provisions under the SB 90 program (for the years 1998-2001) differ from what is proposed for the program extension, and this may restrict what renewable resources qualify for the customer credit. As a result of these uncertainties, the Commission's Environmental and Energy Infrastructure and Licensing Committee has decided to suspend payments until legislation authorizing the expenditure of the extension funds has been approved by the Legislature.

We intend to make payments for any eligible sales of renewable electricity that occur after January 1, 2002 under the terms of the new legislation. If, however, the new legislation authorizes funding for only post-legislation retail sales (i.e. retail sales after the bill is enacted into law), then we intend to make payments for pre-legislation retail sales under the provisions of the SB 90 program, provided funding is available and the payments are not prohibited or otherwise contrary to the new legislation. Under either scenario, payments would require guideline changes, since the current guidelines for the Customer Credit Subaccount do not authorize payments for sales after December 31, 2001.

To qualify for any back payments, registered renewable providers may continue submitting their Monthly Performance Reports (MPRs) according to the following schedule, but a final schedule is expected to be adopted as part of the extension program guidelines:

Performance Period	Earliest Date to Submit MPRs	Latest Date to Submit MPRs
January 2002	April 10, 2002	May 10, 2002
February 2002	May 10, 2002	June 10, 2002
March 2002	June 10, 2002	July 10, 2002
April 2002	July 10, 2002	August 12, 2002

If you have any questions, please contact me at: voice, (916) 654-4735;
fax, (916) 653-2543; or e-mail, hraitt@energy.state.ca.us.

Thank You,

Heather Raitt
Renewable Energy Program
Manager, Customer Credit Subaccount

Glossary

Account refers to the Customer Credit Renewable Resources Account as authorized under SB 1038.

Banking refers to the ability of electrical corporations or utilities to apply excess procurement in one year to procurement obligations in subsequent years or inadequate procurement in one year to one or more subsequent years.

Default utility refers to the electric utility distribution company that owns the power lines and equipment necessary to deliver purchased electricity to customers and is obligated to serve end-use customers in the event wholesale or retail energy service providers cease service.

Direct access refers to the ability of a retail customer to purchase commodity electricity directly from the wholesale marketer rather than through a local distribution utility.

Renewable Energy Certificate (REC) represents the separable bundle of non-energy or non-commodity attributes (environmental, economic, and social) associated with the generation of renewable electricity; the attributes of a given unit of renewable generation, separated from the underlying electrical energy. **Green tag, green ticket,** and **tradable renewable certificate** are often used synonymously with REC.

Stranded costs are costs inherent in the existing electric utility industry rendered potentially unrecoverable in a competitive market.

Subaccount refers to the Customer Credit Subaccount of the Customer-Side Renewable Resource Purchases Account under SB 90.

Endnotes

[1] California Energy Commission, *Investing in Renewable Electricity Generation in California,* P500-00-022, June 2001.
[2] California Public Utilities Commission, Decision D. 01-09-060.
[3] California Energy Commission, *Annual Project Activity Report to the Legislature,* P500-02-068, December 2002.
[4] California Energy Commission, *Volume 4: Customer Credit Subaccount Guidebook* (6th Edition) P500-01-014V4, September 2001.
[5] On December 20, 2000, the Commission allowed for the wholesale trading of renewable attributes to qualify for customer credit, assuming that a matching amount of commodity energy is sold under a direct access contract and that all other program requirements are met.
[6] A wholesaler buys electricity and sells it to providers or acts as a broker in negotiating power sales to providers.
[7] The costs above a determined market price, up to caps on supply, are to be covered for 10 years of generation.
[8] California Public Utilities Commission, Decision D. 01-09-060.
[9] California Public Utilities Commission, Decision D.02-07-032.
[10] California Public Utilities Commission, Decision D.02-11-074.
[11] California Public Utilities Commission, Decision D.02-11-022.
[12] California Public Utilities Commission, Decisions D.02-03-055 (p.16) and D.02-11-022 (p. 109).
[13] The Bay Area Economic Forum, *California's Energy Future: A Framework for an Integrated Power Policy,* November 2002, identifies a spectrum of alternatives for retail electricity choice that are being used in other markets and available for application in California's electric public policy.
[14] Northeast Ohio Public Energy Council, http://www.nopecinfo.org/
[15] SB 1038 limits credits awarded to members of the combined class of customers other than residential and small commercial customers. Credits may not exceed one thousand dollars ($1,000) per customer per calendar year. In no event may more than 20 percent of the total customer incentive funds be awarded to members of the combined class of customers other than residential and small commercial customers.
[16] Center for Resource Solutions, http://www.resource-solutions.org
[17] Public Utilities Code Section 383.5(i).